LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

V COLUMN USINA

M.Sc. DEGREE EXAMINATION - ZOOLOGY

FOURTH SEMESTER - APRIL 2022

PZO 4502 - BIOTECHNOLOGY

Date: 17-06-2022	Dept. No.	Max.: 100 Marks

Time: 01:00 PM - 04:00 PM

PART-A

Answer ALL the questions

(10 X 2=20 Marks)

- 1. Comment on blue- white screening.
- 2. Draw neat labeled diagram of Ti plasmid.
- 3. Expand: VNTR, STR, ICSI & OHSS.
- 4. What is cellular senescence?
- 5. State the importance of cryoprotectants.
- 6. Distinguish finite from continuous cell line
- 7. Define the term animal pharming.
- 8. Name the Microbes used in single cell protein.
- 9. What is bioventing?
- 10. Differentiate lag phase from exponential phase.

PART-B

Answer any **FOUR** of the following

(4 X 10 = 40 Marks)

- 11. Give an account of enzymes used in recombinant DNA technology.
- 12. Elaborate the important features of Ti and Ri plasmids.
- 13. What is blotting? Classify and explain southern blotting technique.
- 14. Write short note on transgenic animals.
- 15. Discuss in detail in-situ bioremediation.
- 16. Explain the production and nutritional value of single cell protein.

PART-C

Answer any TWO of the following

(2 X 20=40 Marks)

- 17. Discuss the tools, process and applications of rDNA Technology
- 18. Enumerate the important features of animal cell culture technology.
- 19. What is a bioreactor? Explain different types of bioreactors.
- 20. Write an essay on the various applications of modern biotechnology.

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